

- 1 **Effect of participation in a randomised controlled trial of an**
- 2 **integrated palliative care intervention on HIV-associated stigma**
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- 4 Short title/running head: Resistance to HIV-associated stigma
- 5 Word count 3599

## 6 Abstract

7 We conducted in Kenya a mixed-methods randomised controlled trial (RCT) of a  
8 nurse-led palliative care intervention integrated with anti-retroviral therapy (ART)  
9 provision for the management of HIV. Here we report qualitative findings showing  
10 increased resistance to HIV-associated stigma among trial participants. A mixed  
11 method design was chosen to enable identification of the active ingredients of the  
12 intervention and exploration of participants' experiences of receiving the intervention.  
13 The RCT was conducted from July 2011 to November 2012 in a community hospital  
14 in the city of Mombasa, Kenya, with a sample of 120 adults with HIV on ART. Thirty  
15 participants were purposively selected to take part in a qualitative exit interview,  
16 based on study arm and mental health outcome.

17 Inductive thematic analysis revealed increased resistance to HIV-associated stigma  
18 in both the intervention and control groups. Specifically, patients in both groups  
19 described benefit from the social support, compassionate care, and open and  
20 respectful communication they received through study participation. Participants  
21 described improved self-image, increased access to social agency, and increased  
22 resistance to HIV-associated stigma. Our findings suggest that there is potential to  
23 increase resistance to stigma through simple mechanisms of support, compassion,  
24 and improved communication in routine care. The self-reported impact of trial  
25 participation on stigma also has implications for future trials in populations in  
26 resource-constrained settings where stigma is common.

27

28 Keywords: HIV/AIDS; Stigma; Shame; Palliative Care; Kenya;

## 29    **Introduction**

30    Stigma was defined by Goffman in 1963 as a mark of social disgrace, where the  
31    stigmatised are excluded from social acceptance and are socially devalued  
32    (Goffman, 1963). Although commonly understood at the individual level (Herek,  
33    Saha, & Burack, 2013a), or the macro-societal level (Parker & Aggleton, 2003), an  
34    appreciation of both acknowledges how social processes become part of a  
35    stigmatised other's identity making resistance at an individual level very difficult  
36    (Catherine Campbell & Deacon, 2006). The persistence of HIV associated stigma, is  
37    a threat to progress in the control of HIV internationally (Stangl & Grossman, 2013), a  
38    barrier to testing (Dapaah & Senah, 2016), prevention of mother-to-child transmission  
39    (Turan & Nyblade, 2013), and, once diagnosis is confirmed, stigma remains a barrier to  
40    PLWH accessing adequate healthcare (Bogart et al., 2013; Dasgupta, Sullivan, Dasgupta,  
41    Saha, & Salazar, 2013). It is also associated with non-adherence to antiretroviral  
42    therapy (ART), increasing the risk of viral resistance (Mhode & Nyamhanga, 2016;  
43    Sweeney & Venable, 2016).

44    Community members often distance themselves from PLWH due to stigma (C.  
45    Campbell, Foulis, Maimane, & Sibiya, 2005; Visser & Sipsma, 2013), denying their own risk  
46    of contracting HIV, putting themselves at increased risk of transmission and delayed  
47    diagnosis (Nyblade et al., 2003). Among PLWH, the social ramifications of disclosure  
48    increase the risk of transmission through reluctance to openly take medications or  
49    negotiate condom use with a sexual partner (Mbonu, van den Borne, & De Vries, 2009;  
50    Turan & Nyblade, 2013).

51    In addition to these public health concerns, there is evidence that people  
52    experiencing HIV-associated stigma report less healthcare utilization, and poorer

physical health (Bennett, Traub, Mace, Juarascio, & O'Hayer, 2016; Herek, Saha, & Burack, 2013b). HIV-associated stigma also manifests as social isolation and rejection (C. Campbell et al., 2005; Owolabi et al., 2012), increasing depression (Palmer et al., 2011; Sumari-de Boer, Sprangers, Prins, & Nieuwkerk, 2012), anxiety (Adewuya et al., 2009) and low self-esteem (Visser & Sipsma, 2013). A recent study suggests that this relationship between HIV-associated stigma and psychological well-being may be mutually reinforcing (Miller et al., 2016).

The international community struggles to identify stigma reduction interventions that are effective for HIV-related health outcomes (Stangl, Lloyd, M Brady, Holland, & Baral, 2013). Studies are often methodologically weak due to predominant use of locally-created and/or un-validated outcome measures, which inhibit interpretation and comparison across studies (Sengupta, Banks, Jonas, Miles, & Smith, 2011; Stangl et al., 2013).

HIV-associated stigma also presents high costs for society (direct and indirect effects of stigma reduction have been valued at a potential \$1000 per point on the Berger Stigma scale) (Brent, 2016).

We conducted a randomised controlled trial (RCT) of a nurse-led palliative care intervention for PLWH established on ART in Mombasa, Kenya (Lowther et al., 2012, 2014, 2015). In qualitative exit interviews, the themes of stigma, resistance to stigma, and the effects of participation in the research, emerged inductively as highly salient to participants. In this paper, we aim to describe experiences of stigma and stigma resistance among PLWH enrolled in the trial, and to draw out implications for clinical practice and research.

## Materials and methods

The Treatment Outcomes in Palliative Care (TOPCare) study was an RCT of a nurse-led, integrated palliative care intervention for HIV positive patients conducted in a clinic in Mombasa, Kenya. The trial had an embedded qualitative component with a sequential, explanatory design (Ivankova, Creswell, & Stick, 2006). Study methodology is reported elsewhere (Lowther et al., 2012), as are details of recruitment, follow up and missing data (Lowther et al., 2014), and results of the trial (Lowther et al., 2015). We found the intervention had significant positive effect in terms of mental health and well-being, but no effect on pain or physical outcomes (Lowther et al., 2015).

The intervention consisted of 4 months of palliative care integrated into patients' routine HIV outpatient care. It was delivered by two experienced HIV clinic nurses who received two weeks' specialist training in palliative care from the Kenyan Hospice and Palliative Care Association and clinical support and mentoring from local hospice nurses. The training covered pain management, symptom management, nutrition, psychosocial and spiritual assessment and care, breaking bad news, ethical and legal issues, and bereavement. Participants in the intervention arm received a minimum of 7 appointments (approximately 45 minutes long) with one of the two intervention nurses. The nurse delivered person-centred care which included a holistic assessment of emotional, spiritual, social and physical well-being, patients' understanding of HIV, and ability to maintain treatment adherence. This assessment informed care delivery, with hospice referral for complex cases of pain and symptom management. Control arm participants received standard care in the Comprehensive Care Clinic (CCC) at the study site, which consisted of monthly

appointments usually lasting 5-7 minutes. They were seen by HIV clinic nurses with similar levels of experience but without the additional training.

## *Sampling*

Participants who met the inclusion criteria for the wider trial were aged  $\geq 18$ , HIV positive and on ART for more than one month, and reported moderate to severe pain or symptoms lasting at least 2 weeks, as measured by the African Palliative Care Association Palliative Outcome Scale (APCA POS (Harding et al., 2010)). The sub-sample recruited to the qualitative component of the study was purposively selected based on study arm allocation and individual quantitative response to participation in the trial. Participants from the intervention arm were over-sampled (10 control /20 intervention) to enable in depth exploration of the active ingredients and mechanism of action of the intervention (data to be reported elsewhere). Sampling was in line with a sequential explanatory mixed methods design: we purposively selected participants to achieve a maximum variation sample based on individuals' clinical response to the intervention. Response was measured using the Medical Outcomes Survey – HIV Mental Health Summary Score (MOS-HIV MHSS), the mental health subscale of a well-validated, disease-specific quality of life measure (Wu, 1999). A change of 10 points on the MOS-HIV MHSS is considered clinically significant (Wu, 1999). Participants were categorised as “improving” if they improved by  $\geq 10$  points during the four-month study period, “static” if there was  $< 10$  points change in either direction, and “deteriorating” if they decreased by  $> 10$  points over the study period.

A sample size of thirty qualitative interviews was chosen to balance opportunity for data saturation with feasibility of in-depth analysis (Sandelowski, 1995).

## 123 *Data collection*

124 Data collection in both groups involved five quantitative data collection appointments  
125 at monthly intervals, with selected participants invited to take part in a qualitative  
126 interview from 1-8 months post trial exit.

127 The same Kenyan researcher (NG) who collected the quantitative data throughout  
128 the RCT conducted the qualitative exit interviews. The researcher was skilled and  
129 experienced in qualitative research, provided with study-specific training, and  
130 bilingual in English and Swahili. The interviews lasted approximately 45 minutes, and  
131 were guided by a semi-structured topic guide developed by the study group. The  
132 topic guide included questions about participants' physical, psychological, social and  
133 spiritual well-being before, during and after the study, in line with the holistic nature  
134 of the palliative care approach (WHO, 2013). Participants were also asked about their  
135 experiences of participating in the study, and, if allocated to the intervention arm,  
136 their perceptions of the differences between the two models of care (intervention vs  
137 standard care).

138 The interviews were conducted in a private location at the study site in either  
139 English, Swahili or both, depending on participant preference. Participants were  
140 welcomed into the study setting, and given refreshments to demonstrate hospitality  
141 and respect. The interviews were digitally recorded, transcribed and translated into  
142 English (where needed) by an experienced translator. Translations were quality  
143 checked by the researcher against the interview recordings, and amended if  
144 inaccuracies or errors were identified.

## *Analysis*

Transcripts were analysed thematically using a combination of deductive and inductive coding (Braun & Clarke, 2006). Deductive themes were identified according to the domains of well-being integral to palliative care (physical, psychological, social and spiritual), while additional themes emerged inductively. Themes were defined as codes or collections of codes containing elements which represented a patterned response or concept (Barbour, 2013). Following Barbour, the following questions were posed to identify themes, with constant reference to the study objectives: “Which codes are repeated? How do they relate to each other? Do these codes relate as sub-themes or associates in that they occur simultaneously?” (Barbour, 2013). Once identified, themes were organised hierarchically into major themes and sub-themes, according to their meaning and relationship to each other, to structure and reduce the volume of data. Major themes were those with high levels of salience and significance, in terms of understanding the therapeutic aspects of the intervention and their repetition across the dataset. Analysis was managed using NVivo 9 software. Findings are presented using anonymised illustrative quotes, annotated with the participant’s gender, age and intervention arm (Tables 2 and 3, cross-referenced in the text).

## *Ethics*

Ethical approval was provided by King’s College London Research Ethics Committee (BDM/10/11-31) and the Kenyan Medical Research Institute (KEMRI/RES/7/3/1). All patients gave written informed consent (if the participant was unable to read or write, the information sheet was read aloud and a thumb print given to indicate consent).



## Results

### *Sample characteristics*

30 participants were interviewed; no one approached declined. Participants were similar to the wider trial sample in terms of clinical and demographic characteristics (Table 1). Mean age was 39.1, with a mean of 2.4 children and 3.2 financial dependants. Most were women (80%, n=24), and two-thirds (67.7%, n=20) completed primary school as their highest educational attainment. Interviews were conducted from one to eight months after trial exit (mean 4.2 months). The research team judged that data saturation was reached in that no new themes emerged from the analysis of later interviews.

[INSERT TABLE 1 NEAR HERE]

### *Findings*

Stigma arose inductively in the data as an important characteristic of participants' experience of living with HIV, described by 25 of the 30 participants. Findings regarding stigma are presented in two themes: experience of HIV-associated stigma, and effects on HIV-associated stigma of participation in the trial.

#### *Experience of HIV-associated stigma (Table 2)*

When asked to describe their well-being before study participation, many participants described the experience of stigma indirectly, in terms of a fear of disclosure of their HIV diagnosis. They anticipated that this would lead to being shamed, socially isolated or discriminated against (quote 1). Participants reported hiding their status behind diagnoses which were more socially acceptable to their networks, for example saying they had tuberculosis (TB). The HIV positive diagnosis led some

participants to self-hatred and suicidal ideation. One participant described how internalised stigma, from cultural norms associating HIV with immorality, created an identity crisis (quote 2). Once they disclosed their HIV status to others, some participants reported experiencing anger and blame from their families and other community members (quote 3).

Experiencing this enacted stigma or discrimination against PLWH, either directly or vicariously, discouraged participants from disclosing their status, which led to increased isolation and suffering. Social isolation was a major cause of sadness; friends from before they were diagnosed had left, increasing their sense of vulnerability and isolation (quote 4)

[INSERT TABLE 2 NEAR HERE]

### *Effects of participation in research on HIV-associated stigma (Table 3)*

During the counselling received in clinical appointments, intervention participants were encouraged by the study nurses to see themselves as normal, just like any other person. This was reported to improve self-esteem, self-image and acceptance, and help participants resist internalised stigma (quotes 5-7). Some intervention arm participants described dramatic changes in their outlook, from suicidal to positive (quote 8). However, the beneficial effects of participation also extended to those PLWH in the control arm, with both groups of participants describing the therapeutic effects of their interactions with the study team (quotes 9, 10)

Participants built a trusting relationship with the researcher who administered the study questionnaires, owing to the compassion they witnessed, and her non-judgemental and open communication style. They described how this way they were treated, enabled them to rebuild a positive self-image (quotes 11, 12). This change in

215 self-regard was often described as a shift in seeing themselves as normal rather  
216 than abnormal, and worthy of respect, social interest and engagement (quotes 13,  
217 14). Participants described how, through this growth in self-esteem, they were more  
218 able to reject stigmatising messages, and became confident in disclosing their HIV  
219 positive status to their close communities (quote 15). Being treated as a normal  
220 person by a health care practitioner was in stark contrast to the advice received by  
221 one participant attending the standard clinic, who reported she was advised to  
222 'behave normally' when she received her diagnosis, in case people realised that she  
223 was HIV positive (quote 16).

224 One of the most powerful aspects of participation in reducing internalised stigma was  
225 being given the space and permission to talk (quotes 17, 18). Some participants  
226 clearly attributed the effect to the process of completing the outcome measurements  
227 (quotes 19, 20). Because of participation in the study and the support they received  
228 through attending data collection appointments, some participants made concrete  
229 changes to their social situations (quote 21). Others became activists in less public  
230 ways, making themselves available to others for counselling and support, particularly  
231 those who had recently received their diagnosis. They described having the  
232 confidence and self-belief to act normally, interacting with their communities  
233 accordingly, and ignoring the stigmatising responses they had previously anticipated  
234 and feared. These newly created identities as 'activists' were socially acceptable and  
235 added purpose to participants' lives participants (quotes 22, 23).

236 [INSERT TABLE 3 NEAR HERE]

## 237 Discussion

238 The findings of this study demonstrate the therapeutic value of a relationship  
239 characterised by compassionate care, social support, and open and non-  
240 judgemental communication. While intervention group participants described benefit  
241 from their appointments with the study nurse, participants in both groups described  
242 the way that simply participating in the trial's data collection procedures helped them  
243 to increase their resistance to the stigma associated with HIV.

244 The researcher completed standardised patient reported outcome measures with  
245 each participant at regular intervals over a four-month time-period. She had no  
246 therapeutic remit or training, yet participants clearly described therapeutic benefit,  
247 including increasing ability to resist stigma. We can see two possible reasons for  
248 this. Firstly, the act of being asked questions about their well-being and problems  
249 may have served to acknowledge their importance. Secondly, being accepted and  
250 treated with respect may have helped patients renegotiate a positive self-identity.

251 This second hypothesis is supported by other studies of HIV-associated stigma  
252 (Goudge, Ngoma, Manderson, & Schneider, 2009; Soskolne, 2003). In a study in South  
253 Africa, women living with HIV described how, given time, they were able to negotiate  
254 a new positive self-identity which helped them cope with anxiety and the stigma of  
255 their HIV diagnosis (Soskolne, 2003). The work of Goudge et al. (2009) describes the  
256 crucial role of social support – the very thing lacking when stigma is present and  
257 powerful - in this process (Goudge et al., 2009). They found that through social  
258 support, PLWH were able to express their emotions, make sense of their diagnosis  
259 and move towards a problem-solving approach toward managing their health,

260 whereas those with less support were less able to adjust and cope (Goudge et al.,  
261 2009).

262 The shift observed in our participant group can also be understood through the lens  
263 of shame and shame resistance theories. Van Vliet's theory of shame resistance  
264 states that to improve the affected person's self-concept individuals must undergo a  
265 process of reconstruction, rebuilding a new identity in response to a shaming  
266 experience (Van Vliet, 2008). She describes the five sub-processes this involves:  
267 connecting, refocusing, accepting, understanding and resisting (Van Vliet, 2008).  
268 These sub-processes appear to mirror our participants' descriptions of their  
269 experience of participating in the trial. Connecting and refocusing are described  
270 when patients talk of the social support they received from the research team.  
271 Acceptance can be seen in their descriptions of learning to accommodate their HIV  
272 status, in part through the acceptance they experienced from the research team.  
273 Participants receiving the intervention described being treated as normal people, told  
274 that they were normal and advised that should treat themselves accordingly, as  
275 particularly potent aspects of the intervention. Central to acceptance was coming to  
276 understand that anyone, even morally 'good' people, can get HIV. The final sub-  
277 process in Van Vliet's theory is resistance. Using their reformed identity and renewed  
278 positive self-image as 'good' or 'normal' people, some participants expressed stigma  
279 resistance through becoming an activist or supporter of other PLWH. Others  
280 expressed their resistance through reaching out to rejecting family members,  
281 deciding not to be ashamed, and widely disclosing their HIV status.

282 Our findings regarding reforming identity reflect those of Aujoulat et al.'s study  
283 (Aujoulat, Marcolongo, Bonadiman, & Deccache, 2008), in which chronically ill

patients described a process through which they managed to resolve their identities as 'people living with a disease', not as 'diseased people'. Aujoulat et al. describe the processes through which individuals come to terms with a disrupted 'well' or 'normal' identity, manage the threat to their security and identity which illness represents, and face the lack of coherence or meaning which often accompanies diagnosis (Aujoulat et al., 2008). This reflects our own data and the wider HIV literature, which highlights that resistance for PLWH involves re-negotiating control over health and illness (Brinsdon, Abel, & Desrosiers, 2017; Goudge et al., 2009).

Our findings suggest that healthcare systems can play a role both in perpetuating and alleviating HIV-associated stigma. Research from South Africa also describes how women attending health care settings appreciated positive interactions with staff, while negative experiences further stigmatised (Okoror, BeLue, Zungu, Adam, & Airhihenbuwa, 2014). Recent research from Bangladesh demonstrates how a sexual and reproductive health rights training package administered to health care workers can reduce the stigma experienced by their patients. This study found that indicators of HIV-associated stigma among healthcare workers were reduced, alongside an increase in patient satisfaction with services (Geibel et al., 2017). In our study, the participants witnessed a working example of supportive, stigma-free care, and help to manage stigma through the provision of space to disclose and discuss openly.

An alternative explanation for the shift we observed in how participants felt could be that participants adjusted to their diagnosis over time. However, this sample of participants had been diagnosed with HIV for a median of 3.5 years (IQR 1.3-5.2) and had been on ART for a median of 2.5 years (IQR 0.8-4.2), therefore it is unlikely that this is the sole explanation. It might also be that the intervention itself, rather

than trial participation, improved stigma resistance. However, the striking similarity between the changes described by both control and intervention arm participants suggests otherwise. There was no contamination in the trial; control arm participants were seen by different clinical nurses. Additionally, the participants repeatedly referred to 'you' (addressing the researcher) as the one who had helped them.

A limitation of the study is that the concept of stigma emerged as an inductive theme during data analysis rather than being explored explicitly in the topic guides. Data on the experience of stigma and response to stigma was therefore not collected from all participants. However, despite this, stigma was a key feature of many patients' experiences of trial participation, described by 25 of the 30 participants. Another limitation is that, due to the inclusion criteria for the wider trial, the findings represent the experiences of PLWH who have been on ART for more than a month and are experiencing non-acute moderate to severe pain or other symptoms. However, this does not negate the importance of the experiences of this patient group. Since interviews were conducted by the same researcher who implemented the study, some social desirability bias is possible. We chose to keep the same researcher for both study components because of her experience and skill in conducting palliative care research, as we believe this skill outweighed any potential bias. Finally, the qualitative interviews necessarily took place after the trial had finished and so could be affected by recall bias.

Our findings have direct implications for clinical care and research for HIV communities, highlighting the association between psychosocial care and increased resistance to HIV-associated stigma. Failing to tackle stigma is a significant threat to infection control, access to testing, adequate treatment, and healthcare utilisation. Stakeholders at all levels of HIV care provision should consider the potential effects

of increasing levels of compassion, communication and social support in the care they provide to help PLWH resist stigma. It may be possible to integrate this approach into other, more established roles that are included in recommendations for best practice, such as treatment navigators or peer educators (Simoni, Pantalone, Plummer, & Huang, 2007; Thompson et al., 2012).

Future research is needed to explore whether the hypothesised shame resistance mechanisms of connecting, refocusing, accepting, understanding and resisting do indeed contribute to stigma resistance in PLWHA. Stigma should also be measured using a standardised outcome measure such as the PLWH Stigma Index, adapted and validated in each cultural setting, to enable cross-study and cross-country comparison and service evaluation (dos Santos, Kruger, Mellors, Wolvaardt, & van der Ryst, 2014; International Planned Parenthood Federation, 2008).

The findings also have implications for researchers working with socially isolated or stigmatised groups, who should consider the beneficial effects of participating in research, which may be in addition to any overt therapeutic input, in study design. This has been discussed more fully elsewhere (Lowther et al., 2016).

Resistance to HIV-associated stigma is possible, and can be encouraged through compassionate communication and social support. If these findings can be replicated at a larger scale and in different contexts, this affordable and life-affirming approach could have considerable public health and clinical significance for management of the HIV pandemic.

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